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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,237	04/10/2001	Sung-Ho Choi	678-646 (P9761-US/STN)	8975

7590 05/16/2005	**EXAMINER**
Paul J. Farrell, Esq.	MOORE, IAN N
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ART UNIT	PAPER NUMBER
2661	

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DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/832,237	CHOI ET AL.
	Examiner	Art Unit
	Ian N. Moore	2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 February 2005</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,3-5,7,8,13 and 17-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>13 and 17-20</u> is/are allowed.

6)☒ Claim(s) <u>1,3-5,7 and 8</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   An objection to the drawings is withdrawn.

2.   Claims 1,3,4,5,7, and 8 are rejected by the new ground(s) of rejection

necessitated by the amendment.

Oath/Declaration

3.   It is noted that the applicant appeared to submit oath or declaration per a cover

letter on July 11, 2001. Yet, **a properly signed** oath or declaration in compliance with

37 CFR 1. 63, identifying the application by the Application Number and Filing Date, is

still missing. Examiner is requesting the applicant to resubmit the missing properly

signed oath or declaration.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claim 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by

Decker (U.S. 6,195,338).

Regarding Claim 1, Decker discloses a method for determining by a UTRAN

a persistence value (see FIG. Variables p(i) and/or persistent rule P) for adjusting a

number of access preambles (see FIG. access requests) from a plurality of UEs (see

FIG. number of active mobile stations M, n(i); see col. 2, lines 50-65) requiring

assignment of a common packet channel (CPCH) (see col. 2, lines 35-40; an access

channel), the method comprising the steps of:

counting the number of the access preambles detected in an access

preamble period having a predetermined period for each transport format (see FIG.

and col. 2, lines 44-56; note that the number of access messages/preambles

received over a time interval are counted by the mobile radio network for each radio

frame/format); and

determining the persistence value based on the number of counted access

preambles for each transport format (see FIG. Variables p(i) and/or persistent rule P;

see col. 2, lines 49 to col. 3, lines 17; note that the base station B determines the

persistence rule P and/or variables p(i) parameters according the counted access

messages/preambles requests for each radio frame/format); and

transmitting the determined persistence value to the UEs (see col. 3, lines 18-

30; mobile stations n(i)) in a cell controlled by a Node B (see FIG. a base station B

within a radio network; see col. 2, lines 44-47; see col. 3, lines 7-35; persistence rule

P and/or variables p(i) parameters are send to mobile stations n(i)).

Regarding Claim 5, Decker discloses a method for determining by a UTRAN

a persistence value (see FIG. Variables p(i) and/or persistent rule P) for adjusting a

number of CD (collision Detection) preambles (see FIG. Detection of collision; see

col. 2, lines 35-42) from a plurality of UEs (see FIG. number of active mobile stations

M, n(i); see col. 2, lines 50-65) requiring assignment of a common packet channel

(CPCH) (see col. 2, lines 35-40; an access channel), the method comprising the

steps of:

counting the number of the CD preambles detected in an access preamble

period having a predetermined period for each transport format (see FIG. and col. 2,

lines 44-56; note that the number of collision detection information in the access

messages/preambles received over a time interval are counted by the mobile radio

network for each radio frame/format); and

determining the persistence value based on the number of counted CD

access preambles for each transport format (see FIG. Variables p(i) and/or

persistent rule P; see col. 2, lines 49 to col. 3, lines 17; note that the base station B

determines the persistence rule P and/or variables p(i) parameters according the

counted collision detection information access messages/preambles requests for

each radio frame/format);

transmitting the determined persistence value to the UEs (see col. 3, lines 18-

30; mobile stations n(i)) in a cell controlled by a Node B (see FIG. a base station B

within a radio network; see col. 2, lines 44-47; see col. 3, lines 7-35; persistence rule

P and/or variables p(i) parameters are send to mobile stations n(i)).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 3, 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Decker in view of 3GPP'321 (ETSI TS 125 321).

Regarding Claim 3, Decker does not explicitly disclose physical common

packet channel.

However, the above-mentioned claimed limitations are taught by 3GPP'321.

In particular, 3GPP'321 teaches persistence value is a unit of physical common

packet channel (see section 11.3, paragraph 2, 3, and step 8; CMAC-config-REQ

consists persistence values which are transmission probability for each Transport

format (TF), and each TF is selected based upon CPCH physical channel. Thus,

physical CPCH channel is utilized as persistence value).

In view of this, having the system of Decker and then given the teaching of

3GPP'321, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to modify the system of Decker, by providing the

persistence values as a probability for each transport format (TF) in each physical

CPCH channel, as taught by 3GPP'321. The motivation to combine is to obtain the

advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3,

paragraphs 1-3 that such modification would provide a controlling mechanism for

each initial preamble ramping cycle as well as successive preamble ramping cycles and provide a mechanism for each TTI transmission while UE continues to transmit on the CPCH channel obtained using the initial access procedure.

Regarding claim 4, Decker discloses the determining persistence value as described above in claim 1.

Decker does not explicitly disclose CPCH set.

However, the above-mentioned claimed limitations are taught by 3GPP'321. In particular, 3GPP'321 teaches persistence value is a unit of CPCH set (see section 11.3, paragraph 2, 3, and step 8; CMAC-config-REQ consists persistence values which are transmission probability for each Transport format (TF) which is a CPCH set. Thus, physical CPCH set is utilized as persistence value).

In view of this, having the system of Decker and then given the teaching of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Decker, by providing the persistence values as a probability for each transport format (TF) which is a CPCH set, as taught by 3GPP'321. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such modification would provide a controlling mechanism for each initial preamble ramping cycle as well as successive preamble ramping cycles and provide a mechanism for each TTI transmission while UE continues to transmit on the CPCH channel obtained using the initial access procedure.

Regarding Claim 7, the claim, which has substantially disclosed all the

limitations of the respective claim 3. Therefore, it is subjected to the same rejection.

Regarding Claim 8, the claim, which has substantially disclosed all the

limitations of the respective claim 4. Therefore, it is subjected to the same rejection.

Second set of rejection

8.   Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Dupont (U.S. 5,729,542) in view of 3GPP'321 (ETSI TS 125 321).

Regarding Claim 1, Dupont'542 discloses a method for determining by a

UTRAN a persistence value (see FIG. 4, P-Persistence parameter) for adjusting a

number of access preambles (see FIG. 5, number of access requests) from a

plurality of UEs (see FIG. 1, mobile station 105) requiring assignment of a common

packet channel (CPCH), the method comprising the steps of:

counting the number of the access preambles detected in an access

preamble period having a predetermined period for each format (see FIG. 5, access

request period which is predetermined access burst period 505; see col. 4, lines 54-

56; see col. 6, lines 60 to col. 6, lines 12; note that the number of access

messages/preambles within a predefined access burst period are counted by the

base station for each frame/format) ; and

determining the persistence value based on the number of counted access

preambles for each format (see FIG. 4, P-Persistence parameters; see col. 4, lines

48-54, 56 to col. 6, lines 12; note that the base station determines the

persistence/probability parameters according the counted access

messages/preambles requests for each frame/format);

transmitting the determined persistence value to the UEs in a cell controlled

by a Node B (see FIG. 2, BSS 220 and/or serving GSN 230; see col. 3, lines 35-60;

see col. 6, lines 1-10; the persistence/probability parameter are transmitted to the

subscribers by BSS/GSN).

Dupont'542 does not explicitly disclose transport format (TF).

However, the above-mentioned claimed limitations are taught by 3GPP'321.

In particular, 3GPP'321 teaches persistence value is a unit of transport format (TF)

(see section 11.3, paragraph 2; CMAC-config-REQ consists persistence values,

which are transmission probability for each Transport format (TF)).

In view of this, having the system of Dupont'542 and then given the teaching

of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to modify the system of Dupont'542, by providing the

persistence values as a probability for each transport format (TF), as taught by

3GPP'321. The motivation to combine is to obtain the advantages/benefits taught by

3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such

modification would provide a controlling mechanism for each initial preamble

ramping cycle as well as successive preamble ramping cycles and provide a

mechanism for each TTI transmission while UE continues to transmit on the CPCH

channel obtained using the initial access procedure. Also, as suggested by

3GPP'321, TF value is used as persistence value in order to determine the

probability of each transport format in each access preamble during CPCH

transmission control.

Regarding claim 3, Dupont'542 discloses the determining persistence value

as described above in claim 1.

Dupont'542 does not explicitly disclose physical common packet channel.

However, the above-mentioned claimed limitations are taught by 3GPP'321.

In particular, 3GPP'321 teaches persistence value is a unit of physical common

packet channel (see section 11.3, paragraph 2, 3, and step 8; CMAC-config-REQ

consists persistence values which are transmission probability for each Transport

format (TF), and each TF is selected based upon CPCH physical channel. Thus,

physical CPCH channel is utilized as persistence value).

In view of this, having the system of Dupont'542 and then given the teaching

of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to modify the system of Dupont'542, by providing the

persistence values as a probability for each transport format (TF) in each physical

CPCH channel, as taught by 3GPP'321. The motivation to combine is to obtain the

advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3,

paragraphs 1-3 that such modification would provide a controlling mechanism for

each initial preamble ramping cycle as well as successive preamble ramping cycles

and provide a mechanism for each TTI transmission while UE continues to transmit

on the CPCH channel obtained using the initial access procedure.

Regarding claim 4, Dupont'542 discloses the determining persistence value as described above in claim 1.

Dupont'542 does not explicitly disclose CPCH set.

However, the above-mentioned claimed limitations are taught by 3GPP'321. In particular, 3GPP'321 teaches persistence value is a unit of CPCH set (see section 11.3, paragraph 2, 3, and step 8; CMAC-config-REQ consists persistence values which are transmission probability for each Transport format (TF) which is a CPCH set. Thus, physical CPCH set is utilized as persistence value).

In view of this, having the system of Dupont'542 and then given the teaching of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Dupont'542, by providing the persistence values as a probability for each transport format (TF) which is a CPCH set, as taught by 3GPP'321. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such modification would provide a controlling mechanism for each initial preamble ramping cycle as well as successive preamble ramping cycles and provide a mechanism for each TTI transmission while UE continues to transmit on the CPCH channel obtained using the initial access procedure.

9.   Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont'542 in view of 3GPP (ETSI TS 125 211).

Regarding Claim 5, Dupont'542 discloses a method for determining by a

UTRAN a persistence value (see FIG. 4, P-Persistence parameter) for adjusting a

number of access preambles (see FIG. 5, number of access requests) from a

plurality of UEs (see FIG. 1, mobile station 105) requiring assignment of a common

packet channel (CPCH), the method comprising the steps of:

counting the number of the access preambles detected in an access

preamble period having a predetermined period for each format(see FIG. 5, access

request period which is predetermined access burst period 505; see col. 4, lines 54-

56; see col. 6, lines 60 to col. 6, lines 12; note that the number of access

messages/preambles within a predefined access burst period are counted by the

base station for each frame/format); and

determining the persistence value based on the number of counted access

preambles for each format (see FIG. 4, P-Persistence parameters; see col. 4, lines

48-54, 56 to col. 6, lines 12; note that the base station determines the persistence

parameters according the counted access messages/preambles requests for each

frame/format);

transmitting the determined persistence value to the UEs in a cell controlled

by a Node B (see FIG. 2, BSS 220 and/or serving GSN 230; see col. 3, lines 35-60;

see col. 6, lines 1-10; the persistence/probability parameter are transmitted to the

subscribers by BSS/GSN).

Dupont'542 does not explicitly disclose transport format and CD (Collision

Detection) preambles.

However, the above-mentioned claimed limitations are taught by 3GPP'211.

In particular, 3GPP'211 teaches transport format (see page 9, paragraph 3; page 11,

paragraph 1; see page 7, paragraph 1; transport format, TF) and CD (Collision

Detection) preambles (see FIG. 6; section 5.2.2.2.1 and 5.2.2.2.3; collision detection

preamble (CD-P)).

In view of this, having the system of Dupont'542 and then given the teaching

of 3GPP'211, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to modify the system of 3GPP'211, by providing and

Transport format and CD-P preambles as one of access preambles in CPCH

transmission, as taught by 3GPP'211. The motivation to combine is to obtain the

advantages/benefits taught by 3GPP'211 since 3GPP'211 states at section

5.2.2.2.1, that such modification would provide fast acquisition indication based on

DSMA-CD approach so that UE can start transmission at a number of well-defined

time-offsets, relative to the frame boundary of the received BCH of the current cell.

Moreover, by utilizing DSMA-CD approach in CPCH transmission, the system can

detect the collision, thereby decreasing the potential collision.

10.   Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Dupont'542 and 3GPP'211, as described above in claim 5, and further in view of

3GPP'321 (ETSI TS 125 321).

Regarding claim 7, Dupont'542 discloses the determining persistence value

as described above in claim 5.

Dupont'542 does not explicitly disclose physical common packet channel.

However, the above-mentioned claimed limitations are taught by 3GPP'321. In particular, 3GPP'321 teaches persistence value is a unit of physical common packet channel (see section 11.3, paragraph 2, 3, and step 8; CMAC-config-REQ consists persistence values which are transmission probability for each Transport format (TF), and each TF is selected based upon CPCH physical channel. Thus, physical CPCH channel is utilized as persistence value).

In view of this, having the combined system of Dupont'542 and 3GPP'211, then given the teaching of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Dupont'542 and 3GPP'211, by providing the persistence values as a probability for each transport format (TF) in each physical CPCH channel, as taught by 3GPP'321. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such modification would provide a controlling mechanism for each initial preamble ramping cycle as well as successive preamble ramping cycles and provide a mechanism for each TTI transmission while UE continues to transmit on the CPCH channel obtained using the initial access procedure.

Regarding claim 8, Dupont'542 discloses the determining persistence value as described above in claim 5.

Dupont'542 does not explicitly disclose CPCH set.

However, the above-mentioned claimed limitations are taught by 3GPP'321.

In particular, 3GPP'321 teaches persistence value is a unit of CPCH set (see section

11.3, paragraph 2, 3, and step 8; CMAC-config-REQ consists persistence values

which are transmission probability for each Transport format (TF) which is a CPCH

set. Thus, physical CPCH set is utilized as persistence value).

In view of this, having the combined system of Dupont'542 and 3GPP'211,

then given the teaching of 3GPP'321, it would have been obvious to one having

ordinary skill in the art at the time the invention was made to modify the combined

system of Dupont'542 and 3GPP'211, by providing the persistence values as a

probability for each transport format (TF) which is a CPCH set, as taught by

3GPP'321. The motivation to combine is to obtain the advantages/benefits taught by

3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such

modification would provide a controlling mechanism for each initial preamble

ramping cycle as well as successive preamble ramping cycles and provide a

mechanism for each TTI transmission while UE continues to transmit on the CPCH

channel obtained using the initial access procedure.

Allowable Subject Matter

11.   Claims 13 and 17-20 are allowed.

Response to Arguments

12.   Applicant's arguments with respect to claim 1,3,4,5,7,8,13,17-20 have been

considered but are moot in view of the new ground(s) of rejection.

Conclusion

13.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37
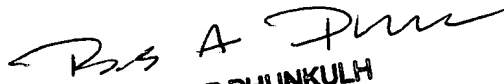
CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

14.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ian N. Moore whose telephone number is 571-272-

3085. The examiner can normally be reached on M-F: 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

BOB PHUNKULH
PRIMARY EXAMINER

INM

5/9/05